Team Controller
Northern Arizona University
Flagstaff, Arizona
October 6th, 2023

Zachary Parham (Team Lead): zjp29@nau.edu
Italo Santos (Mentor): ids37@nau.edu
Bradley Essegian: bbe24@nau.edu
Brandon Udall: bcu8@nau.edu
Dylan Motz: djm658@nau.edu

Team Standards Document

Northrop Grumman

Weapon System Support Software

Harlan Mitchell

Laurel Enstrom

Overview

The purpose of this document is to provide standards, expectations and guidelines for capstone team 7. These standards, expectations and guidelines are used for the development of an efficient and cooperative team.

Team Members and Roles

[1]   Team Leader - Zachary Parham

[1.1]   Organize and plan soft deadlines. This includes:

[1.1.1] Notifying team members in an appropriate and timely manner

[1.1.2] Communicating desired results and outcomes

[1.1.3] Assigning tasks to team members

[1.2]   Communicate with client(s)

[1.3]   Ensure all team members are performing tasks successfully and delivering objectives on time

[1.4]   Schedule team meetings and any auxiliary meetings as need be

[1.5]   Submit Task Tracker to mentor prior to every meeting

[1.6]   Facilitate a resolution to any disagreements and be an unbiased mediator

[1.7]   Work on their assigned tasks in a timely manner

[1.8]   Act as any special role as the team needs

[2]   Architect - Dylan Motz

[2.1]   Responsible for organizing documents.

[2.2]   Checks all design additions/modifications for any issues

[2.3]　During implementation the architect will check to see if the team is following the design and coding standards.

[2.4]　Act as any special role as the team needs

[3]　Head Quality-Assurance - <u>Bradley Essegian</u>

[3.1]　Define and enforce coding standards, structure, testing guidelines, and policy to ensure consistency and quality in code with the Architect

[3.1.1] Includes the product software and team website

[3.2]　Coordinating with the Team Lead to ensure tasks are completed in a timely manner to conduct thorough code analysis

[3.3]　Creating, organizing, and maintaining the public Github repository

[3.3.1] Includes resolving issues in the tracker, managing version control, documentation, and release planning

[3.4]　Act as any special role as the team needs

[4]　Security Analyst - <u>Brandon Udall</u>

[4.1]　Responsible for the integrity of our programs security

[4.2]　Run static analysis on code to prevent oversights and bugs

[4.2.1] Tests will include Valgrind memory leak and illegal memory access tests

[4.2.2] Tests will include cppcheck

[4.2.3] Tests will include clang-analyzer

[4.2.4] Additional tests at the Security Analyst's discretion

[4.3]　Run Dynamic analysis during runtime, check special inputs, edge cases, and prolonged periods of runtime

[4.4] Fill in for any special role the team needs

[5]   Special roles

[3.1]   Note Taker will be a decided via a round robin approach

[3.2]   Quality Assurance will generally be carried out by everyone with the head QA based on availability.

[3.3]   All team members will be Coders and Developers

Team Meeting Expectations

Meeting Times and Attendance

[1]   The team will meet weekly on Tuesdays 2 - 3 pm, prior to mentor meetings unless changed by a unanimous agreement

[2]   The team will meet the mentor weekly on Tuesdays 3 - 4 pm, after the team meeting

[3]   Any additional meetings, i.e. not Tuesday 2 - 3 pm, will be hosted in the discord general chat channel

[4]   Any team member who has an unexcused absence of a team meeting will be given a verbal warning in accordance with **Team Conflicts [3]**

[5]   Any team member who has more than one unexcused absences will be faced with following consequences:

[5.1]   The team will go to the mentor with evidence of multiple unexcused absences. If the mentor is unable to reach an agreement, the team will go to the capstone facilitator.

[5.2]   Proportionate disciplinary action will be taken in accordance with **Team Conflicts [3]**

Agenda Structure

[1.1]   Begin with member check-in, and what they did since last meeting

[1.2]   Plan discussions with rough time estimate

[1.3]   Give a designated space for notes for both team meetings and the mentor meetings

Decision-Making Process

[1]   The team will use a unanimous 4/4 vote to make decisions

[2]   If no unanimous decision can be made, the team will resort to a 2/3rds majority

Team Conduct

[1]   Each team member using digital communication including but not limited to email should use these conduct standards:

[1.1]   Use of official NAU email account

[1.2]   Professional greeting

[1.3]   Professional sign-off

[2]   Each team member must present themselves with professionalism and respect when communicating in person to the clients, mentor or facilitator

Team Conflicts

[1]   Any conflicts that are not resolved unanimously or a 2/3rds vote will be subject to a discussion by all team members

[2]   If the conflict is not resolved by these tactics, the team will present the issue to the mentor as a tie breaking vote

[3]   Any disciplinary action will follow the guidelines given by:

https://www.ceias.nau.edu/cs/CS_Capstone/Docs/Discip-Process-Teams.pdf

Tools and Document Standards

Version Control Standards and Issue Tracking

[1]   The team will use Github to store code, documentation and any auxiliary files that are needed as context

[2]   The branch structure will be as follows:

[2.1]   A main branch that holds the stable version of the product

[2.2]   A secondary "release branch that will hold all work in a sprint

[2.3]   Separate branches for separate problems. This is to limit review to one aspect of the code

[3]   The Github issue tracker will be used to track and identify problems

Word Processing and Presentation

[1]   Any and all documents created to be used with this class will be found in the group's shared Google drive.

[2]   All documents must include a letterhead, intro and the body of the document

[3]   Presentations will also be completed in the group's shared Google drive

Composition and Review

[1]   The team will assign an editor to combine individual documents into a larger document to turn in. The assignment will occur during the team meetings when planning for the work

<mark>Team Review Standards</mark>

[1]   The team agrees to give continuous and candid feedback to the team leader when the opportunity arises

[2]   A self review is required by each team member bi-weekly starting on 10/3/2023. These reviews will take place at the beginning of the corresponding group meeting.

<mark>Changes to Team Standards</mark>

[1]   The team standards document can and will change according to the team. The team can change the standards in the following ways:

[1.1]   A team member may propose a change to the document at any time

[1.2]   Once an item has been proposed, the team will discuss the proposal at the next team meeting, see **Team Meeting [2]**

[1.3]   The amendment will be added to the document only after a unanimous decision has been reached. If the team cannot reach a full consensus, the amendment will be dropped.